997 Functional Acknowledgment

Functional Group ID=FA

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Functional Acknowledgment Transaction Set (997) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.

Notes:

1. Use this implementation convention to acknowledge receipt, and acceptance or rejection of a functional group and the transaction set(s) contained within it based upon EDI translation software syntax edits.

2. Trading partners should limit the scope of the data provided in the case of transaction set receipt and rejection notification to the transaction set level, i.e., the 1/AK3/040 loop should not be used. However, if separate arrangements with trading partners or flexibility within the translation software do not permit this level of response, the procedures identified herein, as applicable to the 1/AK3/040 loop should be followed.

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use	010	ST	Transaction Set Header	M	1		n1
Must Use	020	AK1	Functional Group Response Header	M	1		n2
			LOOP ID - AK2			999999	
	030	AK2	Transaction Set Response Header	O	1		n3
			LOOP ID - AK3			999999	
	040	AK3	Data Segment Note	O	1		c1
	050	AK4	Data Element Note	O	99		
Must Use	060	AK5	Transaction Set Response Trailer	M	1		
Must Use	070	AK9	Functional Group Response Trailer	M	1		
Must Use	080	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments.
The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, one acknowledgment functional group responds to only those functional groups from one application receiver's code to one application sender's code.

There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.

2. AK1 is used to respond to the functional group header and to start the acknowledgement for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.

3. AK2 is used to start the acknowledgement of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.

Transaction Set Comments

1. The data segments of this standard are used to report the results of the syntatical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

Segment:	**ST** **Transaction Set Header**
Position:	010
Loop:	
Level:	
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of a transaction set and to assign a control number
Syntax Notes:	
Semantic Notes:	1 The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
Must Use	ST01	143	**Transaction Set Identifier Code**	M	ID	3/3

Code uniquely identifying a Transaction Set

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	Ref. Des.	Data Element	Name	Attributes		
Must Use	ST02	329	**Transaction Set Control Number**	M	AN	4/9

Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Use to transmit a unique number assigned by the originator of the transaction set. The number may be system generated. This same number will be cited in SE02.

Segment:	**AK1** Functional Group Response Header
Position:	020
Loop:	
Level:	
Usage:	Mandatory
Max Use:	1
Purpose:	To start acknowledgment of a functional group
Syntax Notes:	
Semantic Notes:	**1** AK101 is the functional ID found in the GS segment (GS01) in the functional group being acknowledged.
	2 AK102 is the functional group control number found in the GS segment in the functional group being acknowledged.
Comments:	
Notes:	*1. Use to identify the unique identification number of the functional group in which the transaction set(s) being acknowledged was received.*
	2. Only one functional group may be referenced in a single 997 acknowledgment transaction set.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes		
Must Use **AK101**	**479**	**Functional Identifier Code**	**M**	**ID**	**2/2**
		Code identifying a group of application related transaction sets			
		Cite, using the appropriate code from the X12 code list, the functional group ID found in GS01 of the functional group being acknowledged.			
		Refer to 003050 Data Element Dictionary for acceptable code values.			
Must Use **AK102**	**28**	**Group Control Number**	**M**	**N0**	**1/9**
		Assigned number originated and maintained by the sender			
		Use to identify the number cited in GS06 of the functional group being acknowledged.			

Segment:	**AK2** Transaction Set Response Header
Position:	030
Loop:	AK2
Level:	
Usage:	Optional
Max Use:	1
Purpose:	To start acknowledgment of a single transaction set
Syntax Notes:	
Semantic Notes:	1 AK201 is the transaction set ID found in the ST segment (ST01) in the transaction set being acknowledged.
	2 AK202 is the transaction set control number found in the ST segment in the transaction set being acknowledged.
Comments:	
Notes:	*1. Use to identify the unique identification number of the transaction set being acknowledged.*
	2. AK2 and AK5 shall be provided for each Transaction Set that is accepted.
	3. Also, AK2 and AK5 shall be provided for each Transaction Set being rejected for containing a syntactical error.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
Must Use	AK201	143	**Transaction Set Identifier Code**	M	ID	3/3
			Code uniquely identifying a Transaction Set			
			Refer to 003050 Data Element Dictionary for acceptable code values.			
Must Use	AK202	329	**Transaction Set Control Number**	M	AN	4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set			
			Use to identify the number cited in SE02/ST02 of the transaction set being acknowledged.			

Segment:	**AK3** Data Segment Note
Position:	040
Loop:	AK3
Level:	
Usage:	Optional
Max Use:	1
Purpose:	To report errors in a data segment and identify the location of the data segment
Syntax Notes:	
Semantic Notes:	
Comments:	
Notes:	*1. Use the 1/AK3/040 loop only when a trading partner agreement or translation software do not limit receipt and rejection reporting to the group or transaction set level.*
	2. This 1/AK3/040 loop is used only to identify one or more segments containing syntactical errors resulting in rejection of the transaction set or functional group. This loop is not used when transaction set and functional group receipt and acceptance is being acknowledged.

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
Must Use	AK301	721	Segment ID Code	M	ID	2/3

Code defining the segment ID of the data segment in error (See Appendix A - Number 77)

Use to identify the segment containing syntactical errors, as it appears in the ASC X12 Data Segment Dictionary, e.g., DTM, N1, REF, etc.

	Ref. Des.	Data Element	Name		Attributes	
Must Use	AK302	719	Segment Position in Transaction Set	M	N0	1/6

The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1

Use to identify the segment's sequential position within the data stream of the transaction set as transmitted. This number is not the segment's position number portrayed in the transaction set structure. For example, if the segments used in an 810 request for progress payment were as follows: ST, BIG, REF, N1, N1, PER, ITD, DTM, IT1, IT1, SLN, SLN, SLN, TDS, CTT, SE, and there was a syntax error in the second use of the N1 segment, the number cited would be 5. If the syntax error was in the third use of the SLN segment, the number cited would be 13.

	Ref. Des.	Data Element	Name		Attributes	
	AK303	447	Loop Identifier Code	O	AN	1/4

The loop ID number given on the transaction set diagram is the value for this data element in segments LS and LE

	Ref. Des.	Data Element	Name		Attributes	
	AK304	720	Segment Syntax Error Code	O	ID	1/3

Code indicating error found based on the syntax editing of a segment

1. Use only when a segment is being rejected, to identify the basis for rejection. Do not use when the error is in a data element within the

segment and editing is being done at least to that level.

Refer to 003050 Data Element Dictionary for acceptable code values.

Segment:	**AK4** Data Element Note
Position:	050
Loop:	AK3
Level:	
Usage:	Optional
Max Use:	99
Purpose:	To report errors in a data element and identify the location of the data element
Syntax Notes:	
Semantic Notes:	
Comments:	
Notes:	*Use to identify an error with a data element. When used, there must be a use of the AK3 segment citing the segment in which the data element with the error appears. Use multiple occurrences of this segment to identify all data element errors within the segment specified in the preceding AK3 segment.*

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
Must Use	AK401	C030	**Position in Segment**	M		

Code indicating the relative position of a simple data element, or the relative position of a composite data structure combined with the relative position of the component data element within the composite data structure, in error; the count starts with 1 for the simple data element or composite data structure immediately following the segment ID

	Ref. Des.	Data Element	Name	Attributes		
Must Use	C03001	722	**Element Position in Segment**	M	N0	1/2

This is used to indicate the relative position of a simple data element, or the relative position of a composite data structure with the relative position of the component within the composite data structure, in error; in the data segment the count starts with 1 for the simple data element or composite data structure immediately following the segment ID

Use to indicate the position of the data element, within the segment, containing the error, e.g., 3, 12, etc.

	Ref. Des.	Data Element	Name	Attributes		
	C03002	1528	**Component Data Element Position in Composite**	O	N0	1/2

To identify the component data element position within the composite that is in error

	Ref. Des.	Data Element	Name	Attributes		
	AK402	725	**Data Element Reference Number**	O	N0	1/4

Reference number used to locate the data element in the Data Element Dictionary

Use to identify the data element number as it appears in the ASC X12 Data Element Dictionary, for example, the data element number for N101 is 98, the data element number for N103 is 66.

	Ref. Des.	Data Element	Name	Attributes		
Must Use	AK403	723	**Data Element Syntax Error Code**	M	ID	1/3

Code indicating the error found after syntax edits of a data element

Refer to 003050 Data Element Dictionary for acceptable code values.

	Ref. Des.	Data Element	Name	Attributes		
	AK404	724	**Copy of Bad Data Element**	O	AN	1/99

This is a copy of the data element in error

Segment:	**AK5** Transaction Set Response Trailer				
Position:	060				
Loop:	AK2				
Level:					
Usage:	Mandatory				
Max Use:	1				
Purpose:	To acknowledge acceptance or rejection and report errors in a transaction set				
Syntax Notes:					
Semantic Notes:					
Comments:					
Notes:	*Use to indicate whether the transaction set indicated in the corresponding AK2 segment was accepted or rejected. If the transaction set is being rejected, use this segment to identify up to five (5) syntax errors at the transaction level.*				

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
Must Use	AK501	717	**Transaction Set Acknowledgment Code**	M	ID	1/1

Code indicating accept or reject condition based on the syntax editing of the transaction set

Refer to 003050 Data Element Dictionary for acceptable code values.

	AK502	718	**Transaction Set Syntax Error Code**	O	ID	1/3

Code indicating error found based on the syntax editing of a transaction set

1. Use only when a transaction set is being rejected, to identify the basis for rejection. If multiple codes apply, they may be carried in AK503 through AK506, as necessary. No individual code may be used more than once in a single use of this segment.

2. Use code 5 when the 1/AK3/040 loop is not used and syntactical errors occurred below the transaction set level.

Refer to 003050 Data Element Dictionary for acceptable code values.

	AK503	718	**Transaction Set Syntax Error Code**	O	ID	1/3

Code indicating error found based on the syntax editing of a transaction set

Refer to 003050 Data Element Dictionary for acceptable code values.

	AK504	718	**Transaction Set Syntax Error Code**	O	ID	1/3

Code indicating error found based on the syntax editing of a transaction set

Refer to 003050 Data Element Dictionary for acceptable code values.

	AK505	718	**Transaction Set Syntax Error Code**	O	ID	1/3

Code indicating error found based on the syntax editing of a transaction set

Refer to 003050 Data Element Dictionary for acceptable code values.

	AK506	718	**Transaction Set Syntax Error Code**	O	ID	1/3

Code indicating error found based on the syntax editing of a transaction set

Refer to 003050 Data Element Dictionary for acceptable code values.

Segment:	**AK9** Functional Group Response Trailer
Position:	070
Loop:	
Level:	
Usage:	Mandatory
Max Use:	1
Purpose:	To acknowledge acceptance or rejection of a functional group and report the number of included transaction sets from the original trailer, the accepted sets, and the received sets in this functional group
Syntax Notes:	
Semantic Notes:	
Comments:	**1** If AK901 is 'A' or 'E', then the transmitted functional group is accepted. If AK901 is 'R', then the transmitted group is rejected.
Notes:	*1. Use only to indicate whether the functional group was accepted or rejected based on syntax errors in the functional group header or trailer.*
	2. If a functional group is rejected, all transaction sets within that group must be rejected using the AK9. In this case, individual AK2s for the rejected transaction sets need not be provided.
	3. If the functional group is being rejected, use to identify up to five (5) syntax errors at the functional group level.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
Must Use	**AK901**	**715**	**Functional Group Acknowledge Code**	**M**	**ID**	**1/1**
			Code indicating accept or reject condition based on the syntax editing of the functional group			
			Refer to 003050 Data Element Dictionary for acceptable code values.			
Must Use	**AK902**	**97**	**Number of Transaction Sets Included**	**M**	**N0**	**1/6**
			Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element			
Must Use	**AK903**	**123**	**Number of Received Transaction Sets**	**M**	**N0**	**1/6**
			Number of Transaction Sets received			
Must Use	**AK904**	**2**	**Number of Accepted Transaction Sets**	**M**	**N0**	**1/6**
			Number of accepted Transaction Sets in a Functional Group			
	AK905	**716**	**Functional Group Syntax Error Code**	**O**	**ID**	**1/3**
			Code indicating error found based on the syntax editing of the functional group header and/or trailer			
			1. Use only when a functional group is being rejected to identify the basis for rejection.			
			2. Codes may also be carried in AK906 through AK909, but no individual code may be used more than once in a single iteration of this			

segment.

Refer to 003050 Data Element Dictionary for acceptable code values.

AK906	**716**	**Functional Group Syntax Error Code**		**O**	**ID**	**1/3**

Code indicating error found based on the syntax editing of the functional group header and/or trailer

Refer to 003050 Data Element Dictionary for acceptable code values.

AK907	**716**	**Functional Group Syntax Error Code**		**O**	**ID**	**1/3**

Code indicating error found based on the syntax editing of the functional group header and/or trailer

Refer to 003050 Data Element Dictionary for acceptable code values.

AK908	**716**	**Functional Group Syntax Error Code**		**O**	**ID**	**1/3**

Code indicating error found based on the syntax editing of the functional group header and/or trailer

Refer to 003050 Data Element Dictionary for acceptable code values.

AK909	**716**	**Functional Group Syntax Error Code**		**O**	**ID**	**1/3**

Code indicating error found based on the syntax editing of the functional group header and/or trailer

Refer to 003050 Data Element Dictionary for acceptable code values.

	Segment:	**SE** **Transaction Set Trailer**
	Position:	080
	Loop:	
	Level:	
	Usage:	Mandatory
	Max Use:	1
	Purpose:	To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).
	Syntax Notes:	
	Semantic Notes:	
	Comments:	**1** SE is the last segment of each transaction set.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	SE01	96	**Number of Included Segments**	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	**Transaction Set Control Number**	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	
			Use the same number cited in ST02.	